

FCC RF Exposure

Product Name: Karaoke Machine for Kids

FCC ID: 2BRQM-KBS100

Model(s): KBS100-PU

1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 The 1 - g and 10 - g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by: $[(\text{max power of channel, including tune - up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1 - g SAR and ≤ 7.5 for 10 - g extremity SAR,

Where:

$$\text{Result} = P/D * \sqrt{F}$$

F= the RF channel transmit frequency in GHz

P=Maximum turn - up power in mw

D=Min. test separation distance in mm

2. Test Result of RF Exposure Evaluation

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit (mW/cm ²)	SAR Test Exclusion
2480	-2.02	-2 ± 1	-1/0.79	5	0.249	3.0	Pass

Note:
PK Output power= conducted power.
Conducted power see the test report HK2508064334-E, antenna gain=2.338dBi

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.249 which is ≤ 3 , RF Exposure testing is not required.

Note: Exclusion Thresholds Results=[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(\text{GHz})}]$

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Distance=5mm